

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-11 (Canceled).

Claim 12 (Previously Presented): A process for preparing at least one alkylaryl compound comprising:

reacting a C₁₀₋₁₄-monoolefin mixture with an aromatic hydrocarbon in the presence of an alkylation catalyst to form at least one alkyl aromatic compound;

wherein, in the C₁₀₋₁₄-monoolefins, on average, more than 0% and up to 100% of methyl branches are present in the longest carbon chain and fewer than 30% of the methyl branches are in the 2-, 3- and 4-position, calculated starting from the chain ends of the longest carbon chain; and

the alkylation catalyst is selected from the group consisting of a zeolite of the EPI structural type, a zeolite of the FER structural type, a pentasil having an MFI structure, and a pentasil having an MEL structure.

Claim 13 (Previously Presented): A process according to claim 12, wherein, in the C₁₀₋₁₄-monoolefins, on average, from 10 to 80% of methyl branches are present in the longest hydrocarbon chain.

Claim 14 (Previously Presented): A process according to claim 12, wherein the C₁₀₋₁₄-monoolefins in each case have a maximum of two methyl branches.

Claim 15 (Previously Presented): A process according to claim 14, wherein the C₁₀₋₁₄-monoolefins in each case have a maximum of one methyl branch.

Claim 16 (Previously Presented): A process according to claim 12, wherein the aromatic hydrocarbon is benzene.

Claim 17 (Canceled).

Claim 18 (Previously Presented): A process according to claim 12, wherein the alkylation is carried out in the liquid phase at a temperature in the range from 100 to 250°C.

Claims 19-20 (Canceled).

Claim 21 (Previously Presented): A process for preparing at least one alkylaryl compound comprising:

reacting a C₁₀₋₁₄-monoolefin mixture with an aromatic hydrocarbon in the presence of an alkylation catalyst to form at least one alkyl aromatic compound; and

sulfonating and neutralizing the resulting at least one alkylaryl compound;

wherein, in the C₁₀₋₁₄-monoolefins, on average, more than 0% and up to 100% of methyl branches are present in the longest carbon chain and fewer than 30% of the methyl branches are in the 2-, 3- and 4-position, calculated starting from the chain ends of the longest carbon chain; and

the alkylation catalyst is selected from the group consisting of a zeolite of the EPI structural type, a zeolite of the FER structural type, a pentasil having an MFI structure, and a pentasil having an MEL structure.

Claim 22 (Previously Presented): The process according to claim 21, wherein, in the C₁₀₋₁₄-monoolefins, on average, from 10 to 80% of methyl branches are present in the longest hydrocarbon chain.

Claim 23 (Previously Presented): The process according to claim 21, wherein the C₁₀₋₁₄-monoolefins in each case have a maximum of two methyl branches.

Claim 24 (Previously Presented): The process according to claim 21, wherein the C₁₀₋₁₄-monoolefins in each case have a maximum of one methyl branch.

Claim 25 (Previously Presented): The process according to claim 21, wherein the aromatic hydrocarbon is benzene.

Claim 26 (Previously Presented): The process according to claim 21, wherein the alkylation is carried out in the liquid phase at a temperature in the range from 100 to 250°C.

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Claims 27-28 (Canceled).